# **Fact Sheet**



# For Final Significant Modification Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the original Fact Sheet corresponding with the issuance of the initial Title V operating permit issued on July 11, 2011.

Permit Number: R30-10300006-2011
Application Received: March 26, 2015
Plant Identification Number: 10300006
Permittee: Dominion Transmission, Inc.
Facility Name: Hastings Compressor Station
Mailing Address: 925 White Oaks Blvd.
Bridgeport, WV 26330

Permit Action Number: SM02 Revised: March 8, 2016

Physical Location: Pine Grove, Wetzel County, West Virginia

UTM Coordinates: 528.64 km Easting • 4377.66 km Northing • Zone 17

Directions: From Clarksburg take Route 20 North approximately 37 miles to

Hastings Station on left side of the road.

## **Facility Description**

Hastings Compressor Station is a natural gas facility covered by Standard Industrial Classification (SIC) Code 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. This facility (compressor station) includes three adjacent facilities covered by this Title V permit. The facilities and equipment they currently consist of are as follows:

- 1) Hastings Station production facility:
  - two (2) 500 HP Cooper GMXE-6 engines,
  - one (1) 7.5 mmscf/day glycol dehydration unit with flare,
  - one (1) 0.38 MMBtu/hr reboiler,
  - one (1) 10.0 MMBtu/hr pipeline heater,
  - one (1) natural gas fired auxiliary generator rated at 350HP for emergency use.

- 2) Mockingbird Hill Station (underlying permit R13-2555B) transmission facility:
  - One (1) Generac QT080 Auxillary Generator rated at 128 hp (80 kW);
  - three (3) 80 HP Capstone Microturbines,
  - one (1) 8175 HP Solar Taurus 60 Turbine,
  - one (1) 1.25 MMBtu/hr
- 3) Lewis Wetzel Station (underlying permit R13-2870A) transmission facility:
  - one (1) 3,550 HP Caterpillar Model 3612 Compressor Engine,
  - one (1) 530 HP Cummins Model KTA19G Auxiliary Generator,
  - one (1) 4.5 MMBtu/hr natural gas fired boiler,

This significant modification includes changes covered by recently issued permit R13-3249 related to Hastings Compressor Station. They include the replacement of the following old equipment:

- Natco Dehydration Unit (Emission Unit 004-01),
- Dehydration Unit Flare (Emission Unit DEHY),
- Natco Reboiler (Emission Unit 005-02).

Proposed new replacement equipment includes:

- Inegral TEG Dehydration Unit, 7.5 MMscf/day (Emission Unit 004-02),
- Questor Technologies Q50 enclosed combustion device with a heat input of 2 MMBtu/hr (Emission Unit DEHY1),
- Diverse Energy Systems 550 RECON reboiler with a heat input of 0.55 MMBtu/hr (Emission Unit 005-06).

#### **Emissions Summary**

The following emission changes are associated with this modification:

Regulated Pollutants	PTE change, TPY
NOx	- 1.03
СО	- 6.76
VOC	-3.24
PM <sub>10</sub>	-0.13
SO <sub>2</sub>	-0.008
Total HAPs	-3.30

#### **Title V Program Applicability Basis**

With the proposed changes associated with this modification, this facility maintains potential to emit over 100 TPY of NOx, CO and VOCs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Transmission, Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

#### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This modification has been found to be subject to the following applicable rules:

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45CSR2	Particulate Air Pollution from Combustion
	of Fuel in Indirect Heat Exchangers
45CSR6	Open burning prohibited.
45CSR10	Emission of Sulfur Oxides
45CSR13	Pre-construction permit
40 C.F.R. Part 63, Subpart HH	National Emission Standards for Hazardous
	Air Pollutants From Oil and Natural Gas
	Production Facilities
45CSR30	Operating permit requirement
45CSR34	Emission Standards for HAPs

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

The following is the only permit related to this modification:

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-3249	October 13, 2015	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

### **Determinations and Justifications**

- 1. Emission Units Table 1.1 was revised to replace the old dehydration unit, reboiler and flare (Emission Unit IDs 004-01, 005-02 and DEHY, respectively) with the new ones (Emission Unit IDs 004-02, 005-06 and DEHY1).
- 2. 45CSR§6-4.1 the new flare, DEHY1, has a capacity of 95.9 lbs/hr (<15,000 lbs/hr). Using the calculation procedure outlined in the regulation, the allowable PM emission standard is established as 0.26 lbs/hr:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr) Where, the factor, F, is 5.43 for Incinerator capacity less than 15,000 lbs/hr

Calculation for PM Emissions:

 $(5.43) \times (50,000.0 \text{ cf/day}) \times (1/24 \text{ day/hr}) \times (0.04602 \text{ lb/cf}) \times (\text{ton/2000 lb}) = 0.26 \text{ lbs/hr}$ 

In the requirement 5.1.2 (d) (underlying R13-3249 requirement 4.1.2 (d)), the PM emission limit for the flare was established at 0.01 lbs/hr. Since this limit is below the emission standard calculated per 45CSR§6-4.1 (0.26 lbs/hr), the following streamlining language was added to this requirement: "Compliance with this limit will assure compliance with the PM emission standard per 45CSR§6-4.1".

- 3. 45CSR§6-4.3 per this rule, the new flare, DEHY1, has an opacity limit of 20%. In the requirement 5.1.2(f)(i) (underlying R13-3249 requirement 4.1.2 (f)(i)), the visible emission limit was established at 0% opacity "except for periods not to exceed a total of 5 minutes during two consecutive hours". Therefore, the following streamlining language was added to this requirement: "Compliance with this limit will assure compliance with the opacity limit in 45CSR§6-4.3".
- 4. Facility mailing address was changed on the page 1 of the permit to "925 White Oaks Blvd., Bridgeport, WV 26330".

#### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

- 1. Requirements 3.1.9 and 3.5.10 (45CSR§42-3.1)—deleted because they are no longer applicable.
- 2. Old requirements 5.1.1 through 5.1.4 and 5.1.6 through 5.1.8, 5.2.3, 5.2.4 (45CSR6 and 45CSR10) were removed from the permit because they were covered in new requirements 5.1.2 and 5.2.2 (underlying R13 requirements 4.1.2 and 4.2.2).
- 3. New requirement 5.1.6 (old requirement 5.1.9) part of this condition (40 C.F.R. 63 Subpart HH, §§63.764 (a), (b) and (d)) was removed because the facility can use exemption in §63.764 (e)(1)(ii) since benzene emissions should not exceed 0.90 megagram per year (1 tpy) based on the HAP limit of 0.98 TPY set forth in condition 5.1.2(b) (underlying R13-3249 requirement 4.1.2 (b)).
- 4. Old requirement 5.1.5 was removed from the permit because it is covered in new requirement 5.1.1 (underlying R13 requirement 4.1.1).
- 5. Old requirement 5.1.10 was removed because benzene emissions should not exceed 0.90 megagram per year (1 tpy) based on the HAPs limit of 0.98 TPY set forth in condition 5.1.2(b) (underlying R13-3249 requirement 4.1.2 (b)).
- 6. Old requirements 5.2.1, 5.3.1, 5.4.3, and 5.5.2 were removed because there is a more stringent limit for HAPs (including benzene) set forth in 5.1.2(b), and compliance demonstration with this requirement is set forth in new requirements 5.1.2 (c), 5.2.1 (a) and 5.4.4.
- 7. Old requirement 5.2.2 (flare visible emission checks) was removed, because it was replaced with the new requirement 5.2.3.
- 8. Compliance Assurance Monitoring (CAM) Plan the new reboiler (Emission Unit 005-06) is not considered a PSEU because its emissions are below Title V Major Source applicability thresholds, and it doesn't have a control device, therefore, CAM is not applicable. The dehydration unit (Emission Unit 004-02) is subject to 40CFR63 Subpart HH standards, therefore per §64.2(b)(1)(i) it is exempt from requirements of CAM.

#### **Request for Variances or Alternatives**

None.

# **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: Wednesday, January 20, 2016 Ending Date: Friday, February 9, 2016

All written comments should be addressed to the following individual and office:

Natalya V. Chertkovsky-Veselova Title V Permit Writer West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304

#### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Point of Contact**

Natalya V. Chertkovsky-Veselova West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304

Phone: 304/926-0499 ext. 1220 • Fax: 304/926-0478

#### **Response to Comments (Statement of Basis)**

N/A